

SYSTEM **P**LANNING & **A**NALYSIS **R**EPORT

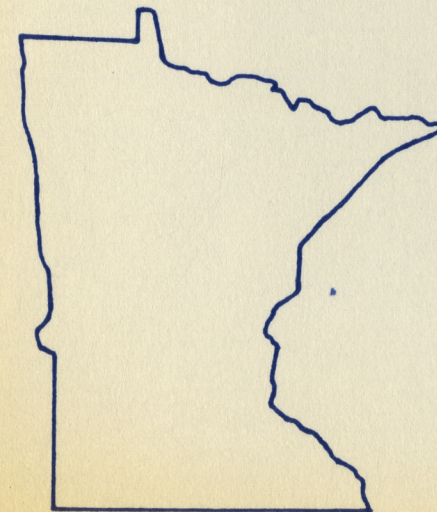
S-93

T. H. 169
AT INTERCHANGE WITH
CO. RD. 60 IN EDEN PRAIRIE

S. P. 2763-08

APRIL, 1972

PREPARED BY
OFFICE OF SYSTEM PLANNING



**MINNESOTA
DEPARTMENT
OF HIGHWAYS**

Office Memorandum

TO : Paul G. Velz
Road Design Engineer

DATE: April 25, 1972

FROM : Morris Gildemeister, Chief
Statewide Planning Section

SUBJECT: T.H. 169, At interchange with Co. Rd. 60 in Eden Prairie
S.P. 2763-08
System Planning & Analysis Report S-93

The Statewide Planning Section transmits this report in response to D. W. Brown's February 15, 1972 request for the 1973 & 1975 ADT, DHV, and HCADT for the project location shown on the map on page 2.

The estimated 1973 and 1975 ADT volumes are shown on the maps on pages 3 and 8 respectively.

For each segment numbered on the maps on pages 3 and 8, the following data are tabulated on pages 4-7 and 9-12 respectively:

- (a) Total ADT
- (b) Vehicle Type Distribution
- (c) Total HCADT

The highest 1970 T.H. 169 one-way ADT volume of 4150 vehicles is on T.H. 169 west of T.H. 494. The 1973 one-way volume on this segment is 5760 vehicles. The corresponding 1975 volume on this segment is 17825.

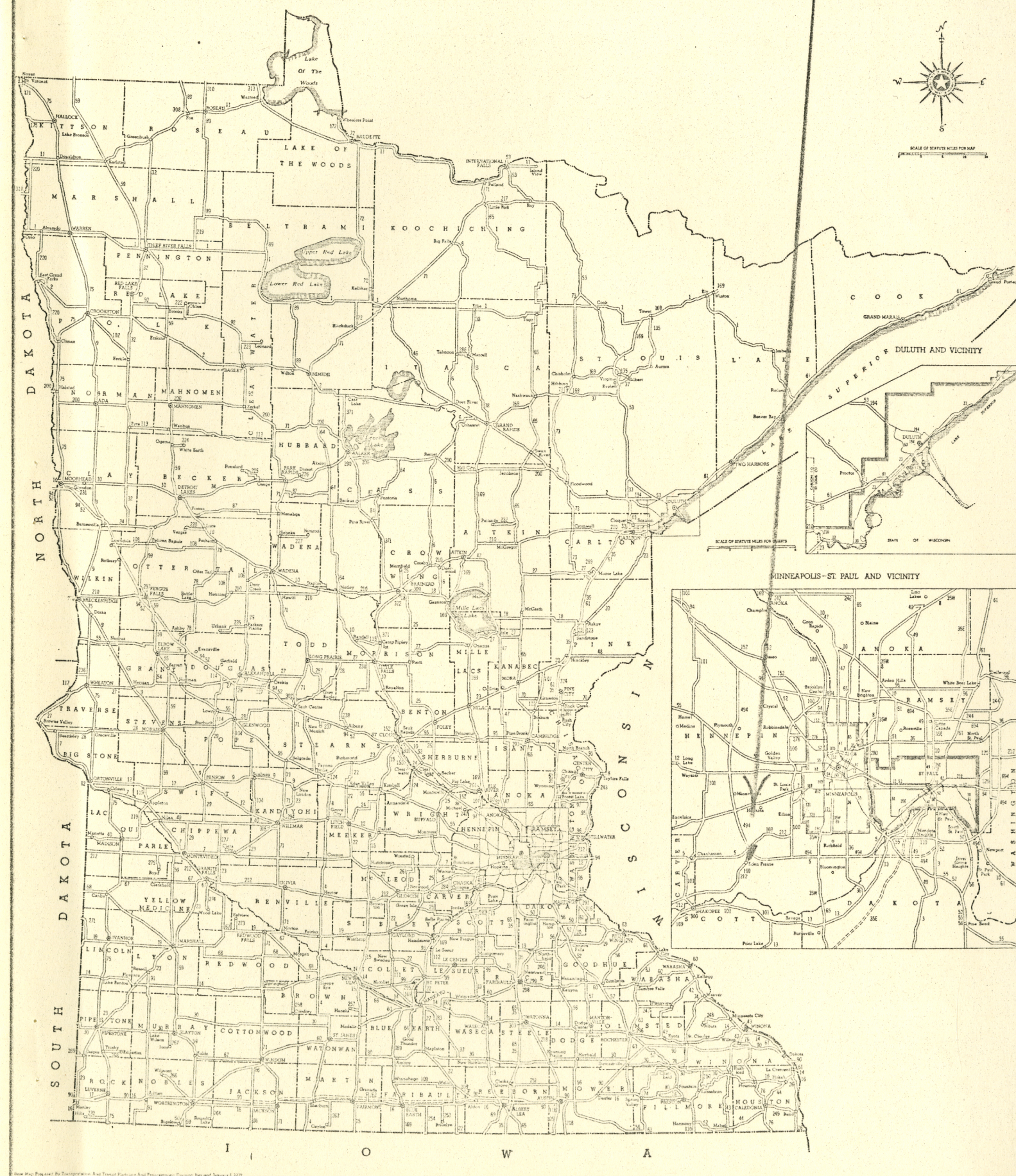
The basic data, method and assumptions used to prepare this report are presented on page 13.

Morris Gildemeister
Morris Gildemeister, Chief
Statewide Planning Section

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STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

Project Location
S.P. 2763-08



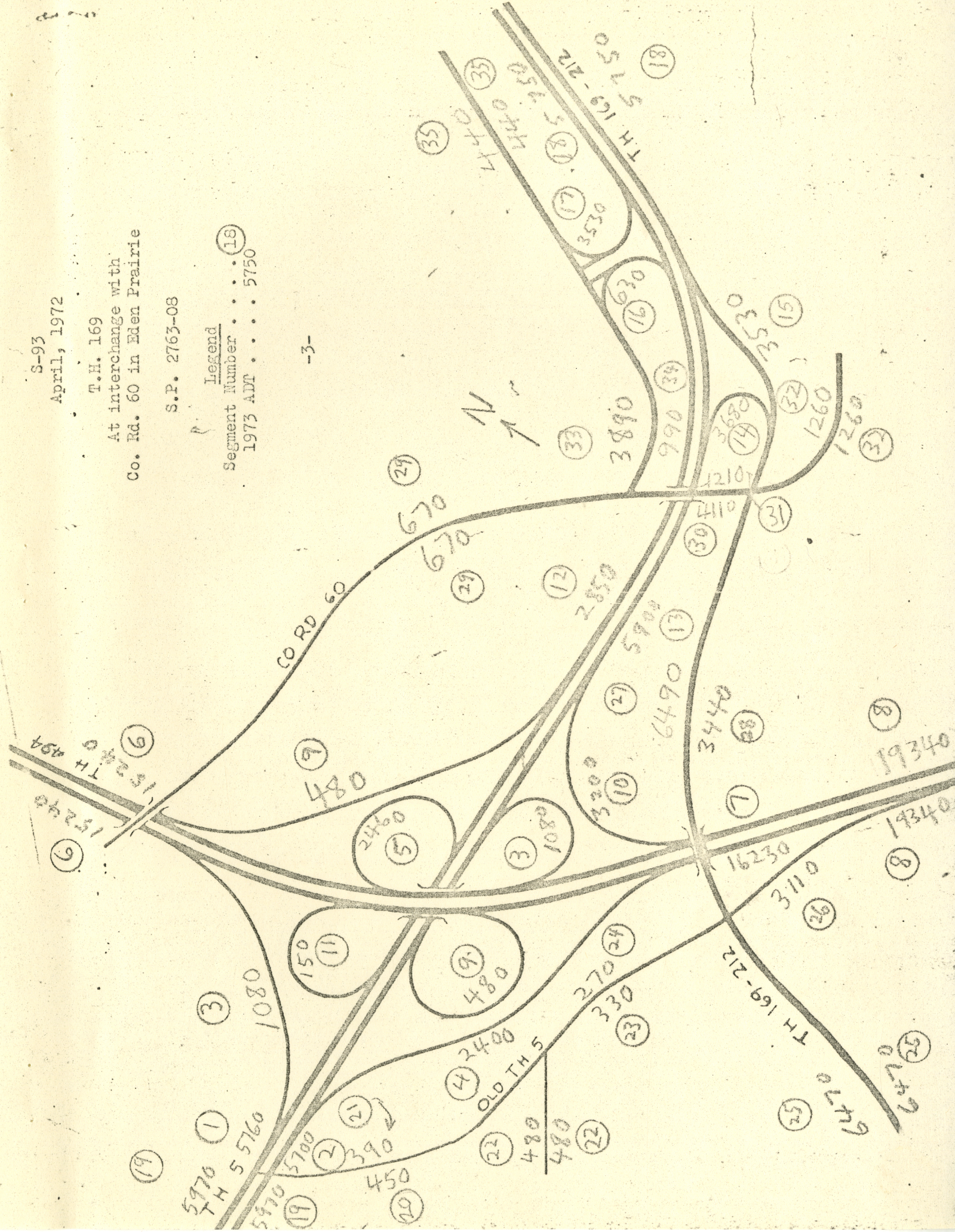
S-93
April, 1972

T.H. 169
At interchange with
Co. Rd. 60 in Eden Prairie

S.P. 2763-08

Legend
Segment Number 18
1973 ADT 5750

-3-



TRAFFIC ESTIMATE DATA

DESIGN YEAR 1973 PART 1 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILESCOUNTY Hennepin LOCATION At interchange with Co. Rd.60 in Eden Prairie

BASED ON

1973 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP on page 3.

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	5396	5340	1014	2250	2306	14409	15328	18322	462	3083	145
1	156	154	30	53	60	384	407	480	8	74	3
2	63	62	9	22	23	92	104	118	2	14	1
3	18	18	3	7	7	63	56	60	1	4	--
4	22	22	6	15	15	80	88	94	1	6	--
5	67	66	10	28	29	120	134	144	4	9	--
6	38	38	8	20	20	102	113	122	2	10	1
TOTAL ADT	5760	5700	1080	2400	2460	15240	16230	19340	480	3200	150
TOTAL H. COMM. ADT	364	360	66	150	154	831	902	1018	18	117	5
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1973 PART 2 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILESCOUNTY Hennepin LOCATION At interchange with Co. Rd.60 in Eden Prairie

BASED ON

1973 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS

DEFINED ON ATTACHED INDEX MAP on page 3.

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	2683	5621	3529	3329	591	3329	5421	5599	431	374	460
1	77	148	94	136	23	136	190	161	12	10	13
2	34	47	15	16	2	16	48	64	4	3	4
3	9	13	5	5	1	5	13	18	--	--	--
4	2	8	7	5	1	5	6	22	--	--	--
5	32	41	9	4	--	4	36	67	2	2	2
6	13	22	21	35	12	35	36	39	1	1	1
TOTAL ADT	2850	5900	3680	3530	630	3530	5750	5970	450	390	480
TOTAL H. COMM. ADT	167	279	151	201	39	201	329	371	19	16	20
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

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 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
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 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1973 PART 3 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILESCOUNTY Hennepin LOCATION At interchange with Co. Rd.60 in Eden Prairie

BASED ON

1973 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS

DEFINED ON ATTACHED INDEX MAP on page 3.

VEHICLE # TYPE	SEGMENT NUMBER											
	23	24	25	26	27	28	29	30	31	32	33	
0	317	259	6148	3013	6167	3269	642	3897	1147	1194	3667	
1	9	7	233	69	234	124	17	129	38	40	133	
2	2	2	39	11	39	21	5	27	8	8	22	
3	--	--	8	3	8	4	--	3	1	1	4	
4	--	--	14	5	14	7	1	3	1	1	4	
5	1	1	10	3	10	5	3	14	4	4	7	
6	1	1	18	6	18	10	2	37	11	12	53	
TOTAL ADT	330	270	6470	3110	6490	3440	670	4110	1210	1260	3890	
TOTAL H. COMM. ADT	13	11	322	97	323	171	28	213	63	66	223	
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

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 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1973 PART 4 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILESCOUNTY Hennepin LOCATION At interchange with Co. Rd.60 in Eden Prairie

BASED ON

1973 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 35 AS

DEFINED ON ATTACHED INDEX MAP on page 3.

VEHICLE # TYPE	SEGMENT NUMBER											
	34	35										
0	939	421										
1	31	12										
2	7	4										
3	--	--										
4	1	--										
5	3	2										
6	9	1										
TOTAL ADT	990	440										
TOTAL H. COMM. ADT	51	19										
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

* VEHICLE TYPE CODE

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 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
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 6 = BUSES AND TRUCKS WITH TRAILERS

59-15

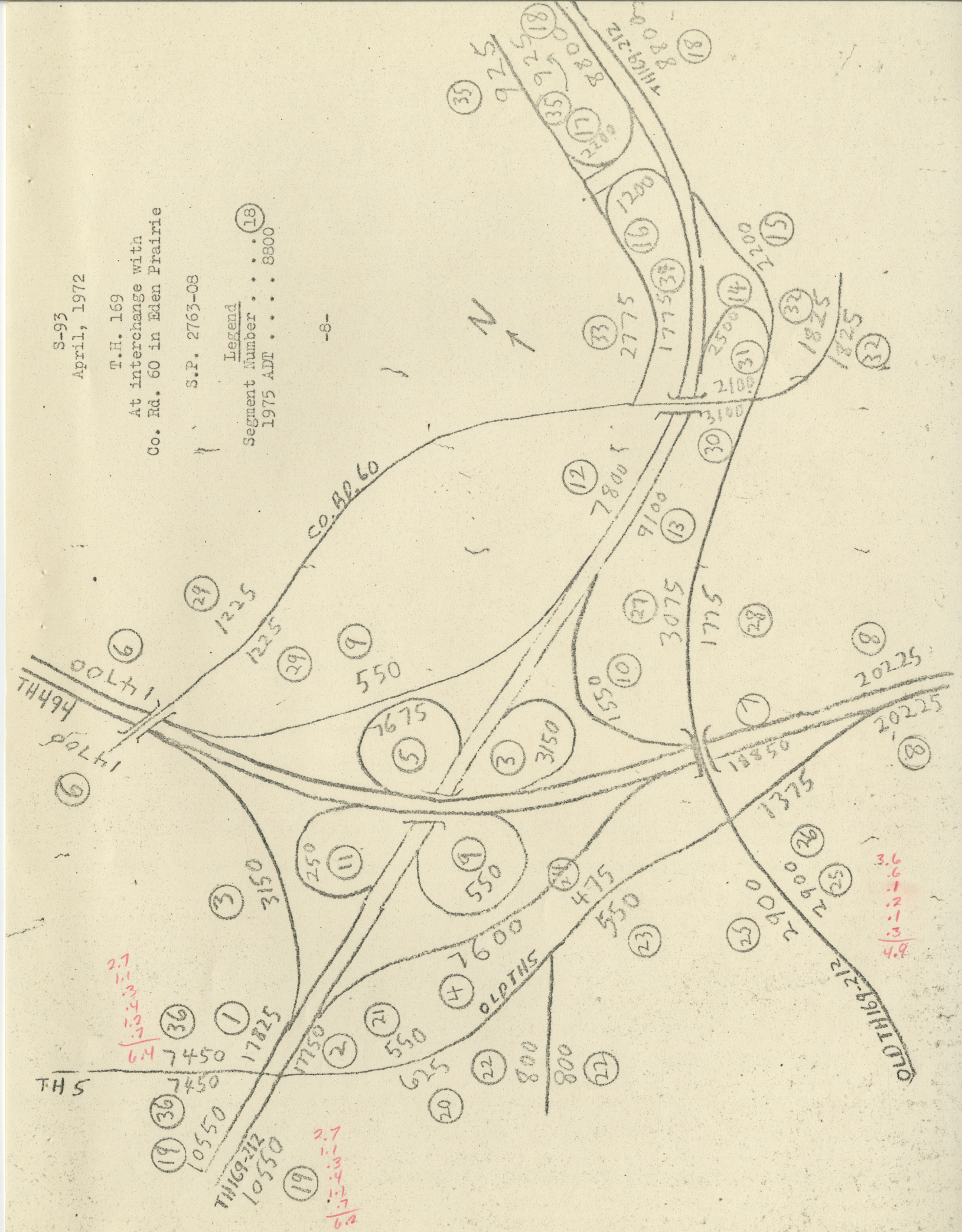
T.H. 169

S. P. 2763-08

Legend

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1975 ADT . . . 8800



TRAFFIC ESTIMATE DATA

DESIGN YEAR 1975 PART 1 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILESCOUNTY Hennepin LOCATION At interchange with Co. Rd.60 in Eden Prairie

BASED ON

1975 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP on page 8.

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	16702	16632	2958	7129	7191	13892	17775	19088	530	1493	242
1	481	478	87	182	182	373	464	501	9	36	5
2	194	192	26	69	72	89	131	139	3	7	2
3	56	56	9	22	22	52	64	66	1	2	--
4	68	68	17	47	47	78	107	110	1	3	--
5	207	205	29	88	91	117	172	179	4	4	--
6	117	119	24	63	64	99	137	142	2	5	1
TOTAL ADT	17825	17750	3150	7600	7675	14700	18850	20225	550	1550	250
TOTAL H. COMM. ADT	1123	1118	192	471	484	808	1075	1137	20	57	8
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

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 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1975 PART 2 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILESCOUNTY Hennepin LOCATION At interchange with Co. Rd.60 in Eden Prairie

BASED ON

1975 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS

DEFINED ON ATTACHED INDEX MAP on page 8.

VEHICLE # TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	7325	8568	2391	2075	1143	2075	8252	9895	598	528	766
1	220	254	65	84	31	84	273	284	17	14	22
2	101	107	11	10	5	10	106	113	6	4	7
3	26	28	4	3	2	3	27	32	--	--	--
4	5	8	6	3	3	3	5	39	1	1	1
5	91	96	10	2	5	2	88	118	2	2	2
6	32	39	13	23	6	23	49	69	1	1	2
TOTAL ADT	7800	9100	2500	2200	1200	2200	8800	10550	625	550	800
TOTAL H. COMM. ADT	475	532	109	125	52	125	548	655	27	22	34
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

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TRAFFIC ESTIMATE DATA

DESIGN YEAR 1975 PART 3 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILES
COUNTY Hennepin LOCATION At interchange with Co. Rd.
60 in Eden Prairie

BASED ON

1975 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS

DEFINED ON ATTACHED INDEX MAP on page 8.

VEHICLE # TYPE	SEGMENT NUMBER											
	23	24	25	26	27	28	29	30	31	32	33	
0	528	455	2757	1333	2922	1687	1173	2941	1990	1730	2625	
1	15	12	104	30	111	64	31	97	66	58	87	
2	3	4	17	5	18	11	9	20	14	12	19	
3	--	--	4	1	4	2	1	2	2	1	4	
4	--	1	6	2	7	4	2	2	2	2	4	
5	2	1	4	1	5	2	5	10	7	6	7	
6	2	2	8	3	8	5	4	28	19	16	29	
TOTAL ADT	550	475	2900	1375	3075	1775	1225	3100	2100	1825	2775	
TOTAL H. COMM. ADT	22	20	143	42	153	88	52	159	110	95	150	
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

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TRAFFIC ESTIMATE DATA

DESIGN YEAR 1975 PART 4 OF 4

FOR

T.H. 169 S.P. 2763-08 LENGTH -- MILES
COUNTY Hennepin LOCATION At interchange with Co. Rd.
60 in Eden Prairie

BASED ON

1975 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 36 AS

DEFINED ON ATTACHED INDEX MAP on page 8.

VEHICLE # TYPE	SEGMENT NUMBER											
	34	35	36									
0	1686	885	6974									
1	51	22	202									
2	14	9	83									
3	2	2	24									
4	3	2	29									
5	6	4	89									
6	13	1	49									
TOTAL ADT	1775	925	7450									
TOTAL H. COMM. ADT	89	40	476									
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

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2 = SINGLE UNIT-3 AXLE TRUCKS
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Basic Data, Method and Assumptions

The 1973 and 1975 ADT and peak hour volumes are presented in M-94 transmitted March 16, 1972. The 1970 ADT counts were expanded by 20% to obtain 1973 ADT. Projected 1975 ADT is based on 1975 System 16 computer traffic assignment in addition to 1970 counts.

HCADT totals agree with System 14 study of heavy truck since no System 16 for trucks has been developed. Vehicle type distributions are based on truck counts taken on roads with traffic volume and characteristics similar to those of the project location.